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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/244,361	02/04/1999	STEVEN CHOW	4103-26421	3662

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EXAMINER

NGUYEN, STEVEN H D

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 07/30/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

B

Office Action Summary

Application No.

09/244,361

Applicant(s)

CHOW ET AL.

Examiner

Steven HD Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,12,18,20,22,28 and 30-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,12,18,20, 22, 28 and 30-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 32-35 and 40-43 are rejected under 35 U.S.C. 102(b) as being anticipated by DeSomer (USP 5173901).

Regarding claims 32-35 and 40-43, Desomer discloses a method and apparatus for transmitting an average rate asynchronous stream and an average rate synchronous stream from a source to destination over a communication link comprising clocking the received average rate synchronous stream into a first buffer (Fig 1, Ref RC1 for storing a synchronous stream in the input queue); clocking the received average rate asynchronous stream into a second buffer (Fig 1, Ref RC2 for storing an asynchronous stream) and transmitting an output stream at output data bit rate wherein the first buffer output the data bits into first time slot and the second buffer output data bits into the second time slot in plurality of frames “time periods” which divided into a plurality of time slots “subplurality of time periods” based on the clock out signal of time division multiplexing wherein repeating the steps of multiplexing the data bits from first and second buffer into output data stream (Fig 1, Ref MUX will multiplex the data stream into a communication link by a time division multiplexing).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 10, 12, 18, 20, 22, 28, 30-31 and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeSomer (USP 5173901) in view of Humphrey (USP 6157657).

Regarding claims 10, 12, 30 and 31, Desomer discloses a method and apparatus for transmitting an average rate asynchronous stream and an average rate synchronous stream from a source to destination over a communication link comprising clocking the received synchronous stream into a first FIFO buffer (Fig 1, Ref RC1 for storing a synchronous stream in the input queue); clocking the received asynchronous stream into a second FIFO buffer (Fig 1, Ref RC2 for storing an asynchronous stream) and transmitting an output stream at output data bit rate wherein the first bits is output into data stream being from the first buffer and the sequential bits are output from the second buffer wherein the sequential plurality of time periods includes at

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least first and second subpluralities of time periods (Fig 1, Ref MUX will multiplex the data stream into a communication link by a time division multiplexing of a frame "time period" which includes a plurality time slots "subpluralities of frame"). However, DeSomer fails to disclose FIFO buffer. In the same field of endeavor, Humphrey discloses the first and second FIFO buffers for storing the synchronous and asynchronous stream (Fig 19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply the FIFO buffers as disclosed by Humphrey into DeSomer's system. Even without, Humphrey's teach, one of ordinary skill in the art would have been replace a queue with a FIFO for storing the data stream because it is well known and expected in the art.

Regarding claims 18 and 28, Desomer discloses a method and apparatus for transmitting an asynchronous stream and a synchronous stream from a source to destination over a communication link comprising a first buffer for storing a synchronous stream at a synchronous data rate; a second buffer for storing an asynchronous stream at an asynchronous data rate the clocking the stored synchronous stream from the first buffer onto the communication link at a first output data rate; clocking the stored asynchronous stream from a second buffer onto the communication link at a second output data rate which is equal the average of the asynchronous data rate. However, DeSomer fails to disclose FIFO buffer. In the same field of endeavor, Humphrey discloses the first and second FIFO buffers for storing the synchronous and asynchronous stream (Fig 19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply the FIFO buffers as disclosed by Humphrey into DeSomer's

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system. Even without, Humphrey's teach, one of ordinary skill in the art would have been replace a queue with a FIFO for storing the data stream because it is well known and expected in the art.

Regarding claims 20 and 22, Desomer discloses a method and apparatus for transmitting an average rate asynchronous stream and an average rate synchronous stream from a source to destination over a communication link comprising clocking the received synchronous stream into a first buffer (Fig 1, Ref RC1 for storing a synchronous stream in the input queue); clocking the received asynchronous stream into a second buffer (Fig 1, Ref RC2 for storing an asynchronous stream) and transmitting an output stream at output data bit rate wherein the first bits is output into data stream being from the first buffer and the sequential bits are output from the second buffer (Fig 1, Ref MUX will multiplex the data stream into a communication link by a time division multiplexing). However, DeSomer fails to disclose FIFO buffer. In the same field of endeavor, Humphrey discloses the first and second FIFO buffers for storing the synchronous and asynchronous stream (Fig 19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply the FIFO buffers as disclosed by Humphrey into DeSomer's system. Even without, Humphrey's teach, one of ordinary skill in the art would have been replace a queue with a FIFO for storing the data stream because it is well known and expected in the art.

Regarding claims 36-39, Desomer discloses a method and apparatus for transmitting an average rate asynchronous stream and an average rate synchronous stream from a source to destination over a communication link comprising clocking the received synchronous stream into

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a first buffer (Fig 1, Ref RC1 for storing a synchronous stream in the input queue); clocking the received asynchronous stream into a second buffer (Fig 1, Ref RC2 for storing an asynchronous stream) and transmitting an output stream at output data bit rate wherein the first buffer output the data bits into first time slot and the second buffer output data bits into the second time slot in plurality of frames "time periods" which divided into a plurality of time slots "subplurality of time periods" based on the clock out signal of time division multiplexing wherein repeating the steps of multiplexing the data bits from first and second buffer into output data stream (Fig 1, Ref MUX will multiplex the data stream into a communication link by a time division multiplexing). However, DeSomer fails to disclose FIFO buffer. In the same field of endeavor, Humphrey discloses the first and second FIFO buffers for storing the synchronous and asynchronous stream (Fig 19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply the FIFO buffers as disclosed by Humphrey into DeSomer's system. Even without, Humphrey's teach, one of ordinary skill in the art would have been replace a queue with a FIFO for storing the data stream because it is well known and expected in the art.

Response to Arguments

5. Applicant's arguments filed 5/12/2003 have been fully considered but they are not persuasive.

In response to pages 4-5, the applicant states that Desomer fails to disclose all the limitation of claims 10, 12, 20, 22, 30-35 and 36-43. In reply, Desomer clearly discloses the

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limitation of these claimed as set forth in the final office action, paragraph 3 for claims 32-35 and 40-43. Furthermore, Desomer clearly discloses the limitation of these claimed as set forth in the final office action, paragraph 5 for claims 10, 12, 20, 22, 30-31 and 36-39 excepting for using FIFO buffers for storing the asynchronous and synchronous data. In the same field of endeavor, Humphrey discloses the use of FIFO buffers for storing the asynchronous and synchronous data. The teaching of Desomer and Humphrey performed the claimed invention. Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

In response to pages 5-7, DeSomer and Humphrey fail to disclose the second data rate equal the average of asynchronous data rate as in the claims 18 and 28. In reply, Desomser discloses the multiplexing will read out the asynchronous data stream from the second buffer by using the clock of the received asynchronous data rate stream. So the multiplexing will read out the data stream at the second buffer at a rate equal the average rate of asynchronous data stream (receiving at clock f_2 and read out at clock f_2 as showed in Fig 1 wherein the output stream from the second FIFO being clock out at a rate equals the average of the asynchronous data rate because the clock in the asynchronous data rate at a clock f_2 and clock out the asynchronous data from the second FIFO at the average of the asynchronous data rate f_2 , the data always clock

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in/out at f2 so the average is f2 because f1 equals f3 + f2 and the synchronous data is clock out at f3). The teaching of Desomer and Humphrey performed the claimed invention.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (703) 308-8848. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (703) 308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

A handwritten signature in black ink, appearing to read 'Steven HD Nguyen', with a long horizontal line extending to the right.

Steven HD Nguyen
Examiner
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July 25, 2003